

48470C Datasheet

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DiGi Electronics Part Number	48470C-DG
Manufacturer	Murata Power Solutions
Manufacturer Product Number	48470C
Description	FIXED IND 47UH 1.8A 274MOHM SMD
Detailed Description	47 μ H Shielded Wirewound Inductor 1.8 A 274mOhm max Nonstandard, 4 Lead



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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

48470C

Series:

4800

Type:

Wirewound

Inductance:

47 μ H

Current Rating (Amps):

1.8 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

10 kHz

Package / Case:

Nonstandard, 4 Lead

Size / Dimension:

0.480" L x 0.480" W (12.20mm x 12.20mm)

Base Product Number:

48

Manufacturer:

Murata Power Solutions

Product Status:

Active

Material - Core:

-

Tolerance:

-

Current - Saturation (Isat):

-

DC Resistance (DCR):

274mOhm max

Frequency - Self Resonant:

-

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.244" (6.20mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



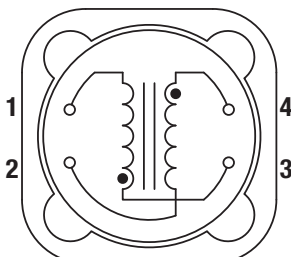
FEATURES

- RoHS compliant
- 1.0 μ H to 400 μ H¹
- Up to 12.3A IDC
- Bobbin format
- Dual winding
- Surface mount
- Integral EMI shield
- Compact size
- Tape and reel packaging
- J-STD-020-C reflow
- Backwards compatible with Sn/Pb soldering systems

DESCRIPTION

The 4800 series is a range of dual wound inductors offering flexible options. Windings have a 1:1 ratio and can be connected in series or parallel to create a wide range of inductance combinations. The secondary winding could also be used as a feedback winding in switched mode power supplies.

PIN CONNECTIONS (TOP VIEW)

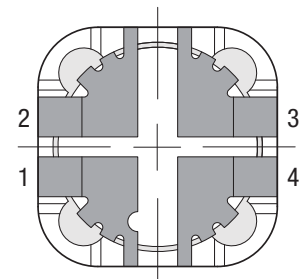
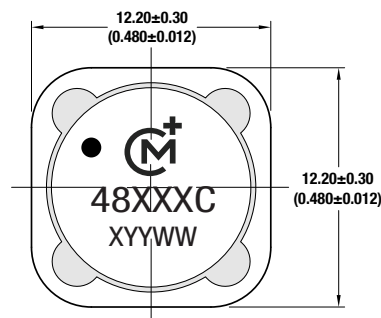


3 & 1 = Primary winding
4 & 2 = Secondary winding

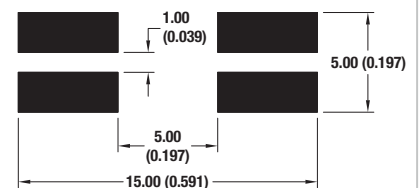
SELECTION GUIDE

Order Code	Inductance ¹ (10kHz, 100mV _{AC}) 1&3, 2&4	Inductance Range (10kHz, 100mV _{AC}) 1&3, 2&4	DC Current ² (parallel connection)	DC Resistance 1&3, 2&4
	Nom.	Min. - Max.	Max.	Max.
	μ H	μ H	A	m Ω
481R0C	1.0	0.66 - 1.11	12.3	9.00
482R2C	2.2	1.64 - 2.73	8.30	13.5
483R3C	3.3	2.29 - 3.82	6.80	19.1
484R7C	4.7	4.18 - 6.27	5.70	29.4
486R8C	6.8	5.22 - 7.83	4.70	39.9
48100C	10	7.65 - 11.5	3.90	61.4
48150C	15	12.2 - 18.2	3.20	77.4
48220C	22	17.7 - 26.6	2.60	119
48330C	33	26.7 - 40.1	2.10	184
48470C	47	37.6 - 56.4	1.80	274
48680C	68	53.8 - 80.7	1.50	409
48101C	100	81.3 - 122	1.23	503

MECHANICAL DIMENSIONS



Recommended Footprint Details



All dimensions in mm (inches).

Package weight: 3.1g Typ.

ABSOLUTE MAXIMUM RATINGS

Isolation voltage (flash tested for 1 second), pins 3 & 4	500V _{DC}
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 125°C

SOLDERING INFORMATION³

Peak reflow temperature	245°C
Pin finish	Tin

Specifications typical at $T_A = 25^\circ\text{C}$

1 When connecting windings in series, inductance will be 4 times the nominal figure shown.

2 If current is flowing in both windings, the maximum DC current occurs when either the inductance falls to 85% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

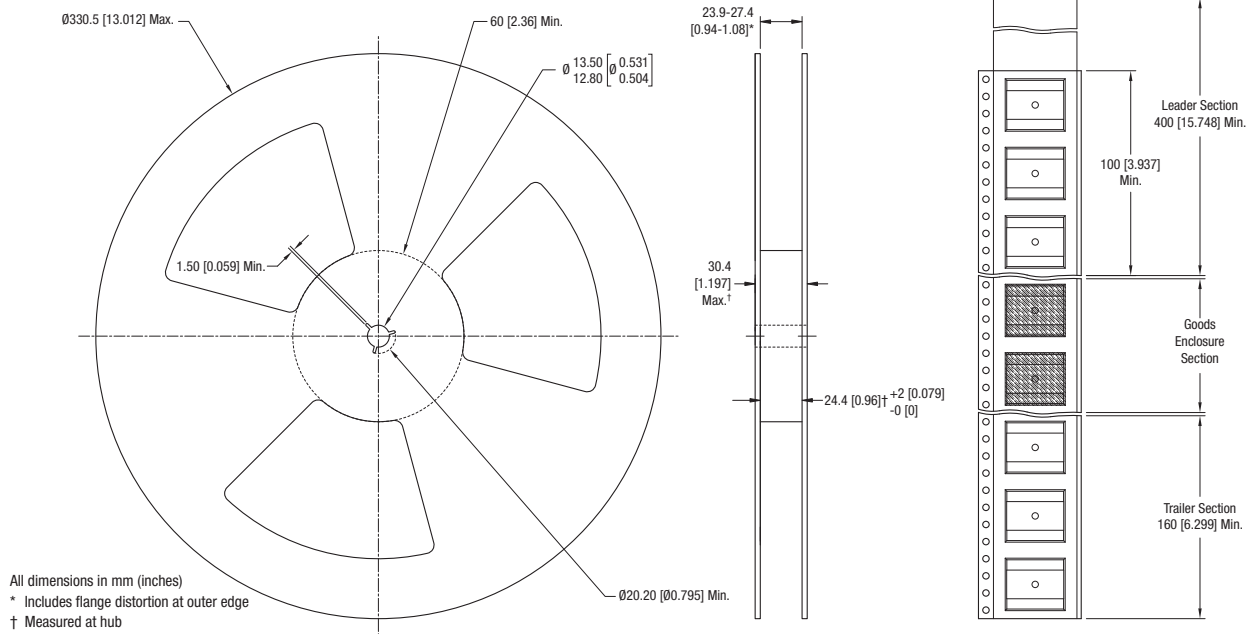
3 For further information, please visit www.murata-ps.com/rohs



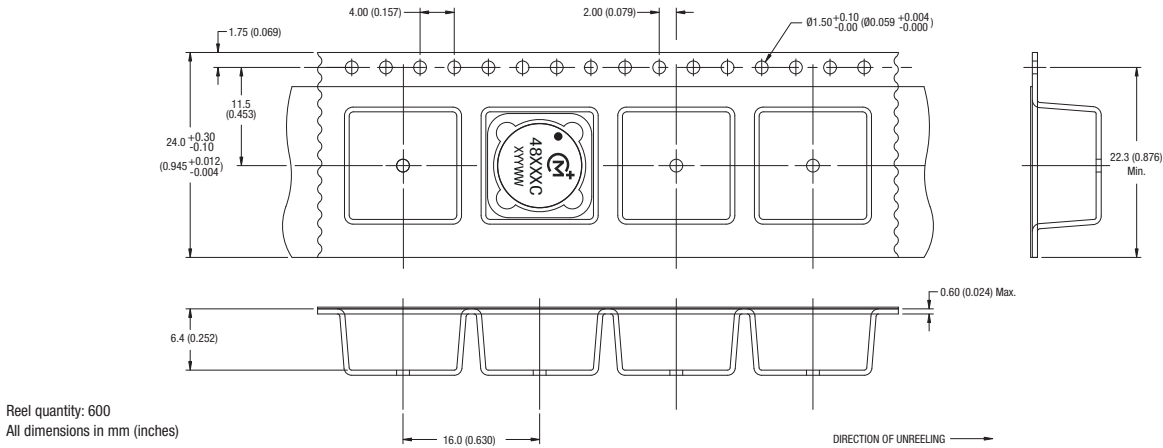
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TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



TAPE OUTLINE DIMENSIONS



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- Power plant control equipment
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- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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